



Environmental Bulletin

Volume 13, Number 10
June 10, 2002

from the Savannah River Site

Remedial Approach Proposed for General Separations Area Consolidation Unit *Public Invited to Comment*

The United States Department of Energy (DOE) released a Statement of Basis/Proposed Plan on June 6, 2002, describing the proposed remedial approach for the General Separations Area Consolidation Unit at the Savannah River Site (SRS). The South Carolina Department of Health and Environmental Control (SCDHEC) will also release a draft Resource Conservation and Recovery Act (RCRA) permit modification for the proposed remedial action for this unit. The plan and draft permit modification will be available for public review and copying at the locations listed below. The public comment period commenced on June 6, 2002, and continues through July 20, 2002. These documents were completed to meet the terms of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and RCRA, laws governing the investigation and cleanup of waste units. DOE has worked with the United States Environmental Protection Agency-Region IV (US-EPA) and (SCDHEC) to ensure that the remedial approach is consistent with all applicable environmental requirements.

Public Information and Public Involvement activities are conducted throughout the various phases of the cleanup process. Public comment periods are held to receive oral and written comments from the public on proposed remedial plans and actions. In addition, as required by RCRA/CERCLA, the opportunity for public meetings, hearings, and briefings is made available during the remedial process and as requested by the public.

The H-Area Retention Basin (HRB) is a single inactive retention basin surrounded by a berm. HRB is 200 ft long by 120 ft wide by 7 ft deep. From 1955 to 1972, it received contaminated wastewater from chemical separations facilities and from the H-Area Tank Farm.

Warner's Pond is a 4-acre site centered on an area that was formerly occupied by a 1-acre pond. The pond was constructed in 1956 as an emergency holding pond to receive contaminated cooling water from the 221-H (H Canyon) building that flowed into an effluent stream.

was formerly occupied by two small holding ponds.

The ORWBG is part of the central disposal area for solid radioactive waste at SRS known as the Burial Ground Complex. Waste was disposed at the ORWBG from 1952 until 1974, when the site was essentially filled and the majority of waste disposal operations shifted to other facilities in the Burial Ground Complex.

US DOE, the US EPA, and SCDHEC have reviewed the risks associated with these units, have evaluated the cleanup alternatives, and have been involved in the remedy selection process. The proposed remedial actions consist of the following:

1. Materials constituting industrial principal threat source material (PTSM) and soils containing contaminant migration constituents of concern (CMCOC) at HRB, Warner's Pond, and HP-52 Ponds will be excavated.
2. The excavated soil and material will be consolidated at the ORWBG in areas that have not yet been covered by the native soil cover.
3. Any vegetation in contact with PTSM will be removed and consolidated in the ORWBG.
4. Surface water from HRB and vadose zone water from HRB, Warner's Pond, and HP-52 will be managed by mixing with excavated soil or other means such as treatment at the Effluent Treatment Facility (ETF).
5. Portions of the H-Area Inactive Process Sewer Line at Warner's Pond will be excavated with the soil or managed by grouting in place.
6. HRB, Warner's Pond, and HP-52 Ponds will be back-filled with clean soil.
7. Institutional Controls will be implemented at HRB, Warner's Pond, and HP-52 Ponds.
8. A low-permeability geosynthetic cover system will be constructed over the ORWBG.
9. Institutional Controls will be implemented at the ORWBG.

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The HP-52 Ponds is a 1.1-acre site centered on an area that

CERCLA Engineering Evaluation/Cost Analysis (EE/CA) for the Grouting of the R-Reactor Disassembly Basin at SRS Available for the Public

The United States Department of Energy (DOE), is planning on performing a non-time critical removal action at Savannah River Site's (SRS) R-Reactor Disassembly Basin. The disassembly basin is found within the Reactor building on site. During production years the disassembly basin temporarily stored radioactive assemblies to allow the short-lived highly radioactive fission products to decay. The disassembly basin has been emptied of all fuel (fissile) and target material and contains a large volume of water. The water remains stagnated as all deionizers, cooling systems and filtration systems have been shutdown. The basin also has approximately 1/8 to 1/4 inch of sludge over much of the basin floor. The basin water depth (at full pool) varied from 17 to 30 feet. The water contains approximately 714 curies of tritium, ~0.4 curies of cesium-137 (Cs-137) and ~0.1 curies of strontium-90 (Sr-90). The sludge contains less than 1 curie of residual radioactivity. No management of the basin water is currently being performed, with the water level about 6 feet below normal full capacity.

The R-Reactor disassembly basin also contains a smaller area (~40 x 80 feet) called the Emergency Basin (EB). The EB was the location of a rupture of an instrumented fuel element (assembly) in 1957. The assembly components were removed and the EB was backfilled with soil in 1964. A 6- to 12-inch concrete cap was also placed on top of the soil backfill. The closed EB, and the radioactivity remaining in it, are not part of the proposed removal activity.

The purpose of this EE/CA, as required by the National Contingency Plan (NCP), is to identify the objectives of the removal action and to develop various alternatives that might satisfy those objectives. Five alternatives have been reviewed in detail. The EE/CA recommends a removal

action and provides a vehicle for public involvement. This document also includes evaluation of ecological, socioeconomic and cumulative impacts, and other factors typically assessed in National Environmental Policy Act (NEPA) reviews.

The proposed action, Alternative 5, would reduce the volume of the basin water by approximately 65 percent via evaporation and grout the remainder of the water in the basin. The sludge on the basin floor and the contents of the EB would remain in place after grouting.

DOE plans to release this document for a 30-day public comment period beginning June 10, 2002. The preferred alternative may be modified or changed based on public comments. Following the public comment period, a "Memorandum Documenting the Decision on the Selection of the R-Disassembly Basin Alternative" will be prepared and transmitted to the public by DOE-SR. This EE/CA, completed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), is available for public review from June 10, 2002 to July 9, 2002 at the following locations:

DOE Public Reading Room at the Gregg-Graniteville Library at the University of South Carolina-Aiken campus in Aiken, SC; and Thomas Cooper Library Government Documents Department at the University of South Carolina in Columbia, SC; Reese Library at Augusta State University in Augusta, GA; and Asa H. Gordon Library at Savannah State University in Savannah, GA.

For additional information contact
Mr. Jim Moore at
1-800-249-8155 or e-mail: jim02.moore@srs.gov

Removal Action to Begin of the Unidentified Trash Pile

DOE will begin a removal action at SRS's D-Area Unidentified Trash Pile on July 12, 2002. On January 25, 1995, a survey party discovered a previously unidentified disposal area in the area northeast of D-Area known as Old Ellenton. This unit consists of a large amount of surface-deposited trash and debris in a wooded area, impacting about 2 acres of land. Asbestos, fiberglass insulation, railroad ties, metal and clay pipe, metal buckets and containers, glass containers, scrap metal, electrical wire, hose/tubing, laboratory glassware, and other inert material were all observed in the debris. Most of the rubble appears to be routine waste and debris from industrial and construction activities.

The removal action is the sorting, segregation, and removal of the waste at the Unidentified Trash Pile (UTP). The removal of the trash will mitigate the potential for future releases to the soil. Following the removal action, the soils underlying the UTP will be characterized and results documented in a revised Site Evaluation Report.

A removal site evaluation report (RSER)/ engineering evaluation/cost analysis (EE/CA), completed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), details how these removal

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- 10. Intruder barriers will be installed over the long-lived persistent hot spots at the ORWBG prior to termination of active institutional controls.

These actions will minimize the direct radiation risk and potential future impacts to the groundwater. This alternative will be protective of human health and the environment. It is also intended to be the final action for the General Separations Area Consolidation Unit.

Comments on the Statement of Basis/Proposed Plan and the draft RCRA permit modification are requested by July 20, 2002. Upon completion of the public comment period, a Responsiveness Summary that addresses public comments will be prepared. The Responsiveness Summary will be made available with the Record of Decision and the final RCRA permit decision, and will be sent to each person who submits comments.

Copies of the Statement of Basis/Proposed Plan are available in the administrative record, which also contains the Remedial Investigation/Feasibility Study (RI/FS) report for these units. The administrative record is available in the information repositories listed below:

- DOE Public Reading Room, Gregg-Graniteville Library, University of South Carolina-Aiken, Aiken, SC; and
- Thomas Cooper Library Government Documents Department, University of South Carolina, Columbia, SC.

Hard copies of the Statement of Basis/Proposed Plan are available at the following locations:

- Reese Library, Augusta State University, Augusta, GA; and
- Asa H. Gordon Library, Savannah State University, Savannah, GA.

Copies of the draft RCRA permit modifications are available for review at SCDHEC during regular business hours, 8:30 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the following locations:

SCDHEC
Bureau of Land and Waste Management
8901 Farrow Road
Columbia, South Carolina 29203
Phone: (803) 896-4000

or

SCDHEC

Lower Savannah District
Environmental Quality Control Office
218 Beaufort St., N.E.

Aiken, SC 29802

Phone: (803) 641-7670 If there is interest in discussing this recommended remedial approach, a public hearing may be requested.

Comments on the draft RCRA Permit modification and requests for public hearings of the Draft RCRA Permit modification should be sent to:

SCDHEC

Attn: John Litton, P.E., Director
Division of Waste Management
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201
(803) 896-4000

Comments on the Statement of Basis/Proposed Plan and requests for public meetings may be sent to:

Jim Moore
Westinghouse Savannah River Company
Savannah River Site
Building 742-A
Aiken, SC 29808
1-800-249-8155
jim02.moore@srs.gov

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actions are being completed and is available for public review and comment from June 10, to July 9, 2002 at the following locations:

DOE Public Reading Room at the Gregg-Graniteville Library at the University of South Carolina-Aiken campus in Aiken, SC; and Thomas Cooper Library Government Documents Department at the University of South Carolina in Columbia, SC; Reese Library at Augusta State University in Augusta, GA; and Asa H. Gordon Library at Savannah State University in Savannah, GA.

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MAILING LIST

Name

e-mail address

mailing address

Mail to:

SRS Environmental Bulletin
Savannah River Site
Building 742-A
Aiken, S.C. 29808



The SRS

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For more information on this or other environmental and compliance activities at SRS, please contact:

Jim Moore	Lyddie Broussard
Westinghouse Savannah River Company	Westinghouse Savannah River Company
Public Involvement	Public Involvement
Aiken, S.C. 29808	Aiken, S.C. 29808
(800) 249-8155	(803) 725-7169

e-mail: jim02.moore@srs.gov

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